MUKILTEO MULTIMODAL PROJECT
Draft Environmental Impact Statement

Summary

JANUARY 2012
MUKILTEO MULTIMODAL PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT

SUMMARY

Prepared for:

U.S. Department of Transportation
Federal Transit Administration

Washington State
Department of Transportation

Washington State Ferries

January 2012
MUKILTEO MULTIMODAL PROJECT
SNOHOMISH COUNTY, WASHINGTON

DRAFT ENVIRONMENTAL IMPACT STATEMENT

PREPARED PURSUANT TO:


by the

FEDERAL TRANSIT ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION

and the

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

with the cooperation of

CITY OF MUKILTEO
CITY OF EVERETT
SNOHOMISH COUNTY
PORT OF EVERETT
SOUND TRANSIT
COMMUNITY TRANSIT
SAMISH INDIAN NATION
STILLAGUAMISH TRIBE
SUQUAMISH TRIBE
TULALIP TRIBES
U.S. AIR FORCE
U.S. ARMY CORPS OF ENGINEERS

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Date of Approval

Date of Approval
ABSTRACT

The Washington State Department of Transportation, Ferries Division proposes the Mukilteo Multimodal Project to improve the operations, safety, and security of facilities serving the mainland terminus of the Mukilteo-Clinton ferry route in Washington State. The ferry route is part of State Route 525, the major transportation corridor crossing Possession Sound, which separates Island County from the central Puget Sound mainland. The proposed project is located in the city of Mukilteo and the city of Everett in Snohomish County, Washington. This environmental impact statement (EIS) evaluates the No-Build Alternative and three Build alternatives for their potential effects on the natural and built environments. Mitigation measures to avoid, reduce, or compensate for anticipated impacts are also discussed in this EIS. The Build alternatives evaluated are: Existing Site Improvements, Elliot Point 1, and Elliot Point 2.

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A 45-day period has been established for commenting on this document. Comments may be submitted in writing or may be made orally at the public hearings. Written comments should be submitted to Paul W. Krueger at the address above. Public hearings will be held on February 22, 2012 in Mukilteo, WA and February 23, 2012 in Clinton, WA. All comments received by March 12, 2012 will be considered by the project administrators and will be included in the formal record.
Fact Sheet

Project Title
Mukilteo Multimodal Project

Proposed Action
The Washington State Department of Transportation (WSDOT), Ferries Division (also known as Washington State Ferries [WSF]) proposes the Mukilteo Multimodal Project to improve the operations, safety, and security of facilities serving the mainland terminus of the Mukilteo-Clinton ferry route in Washington State. The Federal Transit Administration (FTA) has provided funding during the project’s planning phase and may be a source of construction funding. FTA and WSDOT are making this proposal available for public review in compliance with the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA).

The proposed project is located in the city of Mukilteo and the city of Everett in Snohomish County, mostly west of the Mukilteo/Everett city line. The area under consideration begins on the eastern edge of Mukilteo Lighthouse Park and extends to the eastern edge of the U.S. Air Force's Mukilteo Tank Farm in the city of Everett and adjacent to the Port of Everett Mount Baker Terminal. In a separate action, the U.S. Air Force would need to transfer property rights or otherwise make the property available before any alternative on the Mukilteo Tank Farm could be developed.

This environmental impact statement (EIS) documents the analysis of the No-Build Alternative and three Build alternatives. These alternatives are summarized below.

No-Build includes what would reasonably be needed to maintain the existing ferry terminal at a functional level. Under the No-Build Alternative, an improved multimodal transportation facility to meet future demand or operational needs would not be developed. Instead, the No-Build Alternative assumes that maintenance and structure replacements would occur in accordance with legislative direction to maintain and preserve ferry facilities. WSF would make no major facility investments to improve the operation, safety, security, or capacity at the terminal.

Existing Site Improvements reconstructs, expands, and realigns the terminal and its related facilities on and around the current site. A new transit center would be constructed and the existing vehicle holding area would be reconfigured. New toll booths, operations buildings, and a new passenger building would be constructed. New overhead passenger loading ramps would connect to the second story of a new passenger building.

Elliot Point 1 relocates the ferry terminal from its current location to the eastern portion of the Mukilteo Tank Farm in both Mukilteo and Everett. This alternative also provides a transit center near the ferry terminal. A new passenger building and a maintenance building would be located overwater upon a new concrete trestle. An
overhead passenger loading ramp would connect to the second story of a new passenger building. The Tank Farm Pier and the existing ferry terminal would be removed. First Street would be realigned and extended as a four-lane roadway from SR 525 to the Mount Baker Terminal in the city of Everett. The alternative also includes modified intersections; a modification to the Sound Transit Mukilteo Station; the development of sidewalks and bike lanes, parking areas, toll booths, ferry vehicle holding areas, and a shoreline promenade on each side of the new ferry dock; and the restoration of part of Japanese Creek to an open stream.

Elliot Point 2 relocates the ferry terminal from its current location to the central portion of the Mukilteo Tank Farm, with the vehicle holding area to the west of the terminal and the transit center and parking to the east. This alternative would remove the current terminal and the Mukilteo Tank Farm Pier and develop the same types of marine facilities as Elliot Point 1, but would require fewer supporting piles than Elliot Point 1, less overwater construction, and would be closer to shore. Passenger and maintenance buildings would be on land. Roadway improvements would include a realignment and extension of First Street as a four-lane roadway to the central section of the Mukilteo Tank Farm. The Sound Transit commuter rail station would be modified with relocated parking, and a new bus transit center and parking areas would be built on the Mukilteo Tank Farm site. The alternative would also develop sidewalks, bike lanes, and a shoreline promenade on each side of the new ferry dock.

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Anticipated Permits and Approvals

Federal
- Federal Transit Administration, U.S. Department of Transportation
  - National Historic Preservation Act, Section 106
  - Section 4(f) Impact to Historic and Recreation Resources
- U.S. Army Corps of Engineers
  - Rivers and Harbors Act, Section 10 Permit
  - Clean Water Act, Section 404 Permit
- U.S. Fish and Wildlife Service
  - Endangered Species Act, Section 7(a)(2) Biological Opinion
  - Disturbance Permit (Bald and Golden Eagle Protection Act)
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• National Marine Fisheries Service
  ➢ Endangered Species Act, Section 7(a)(2) Biological Opinion
  ➢ Incidental Harassment Authorization (Marine Mammal Protection Act)
  ➢ Biological Opinion (Magnuson-Stevens Fishery Conservation and Management Act)

State
• Washington State Department of Fish and Wildlife
  ➢ Hydraulic Project Approval
• Washington State Department of Natural Resources
  ➢ Authorization for use of state-owned aquatic lands
• Washington State Department of Ecology
  ➢ Clean Water Act, Section 401 Permit
  ➢ Coastal Zone Management Consistency Determination
  ➢ National Pollution Discharge and Elimination System (NPDES) Construction Stormwater General Permit
• Washington Department of Archaeology and Historic Preservation
  ➢ National Historic Preservation Act, Section 106 Consultation

Local
• City of Mukilteo and City of Everett
  ➢ Substantial Shoreline Development Permit
  ➢ Critical Area Application
  ➢ Essential Public Facility Permit
  ➢ Engineering Permit
    • Shoreline Variance
    • Zoning Variance
    • Grading and Clearing Permit
    • Right of Way Permit
  ➢ Building Permit

Authors and Principal Contributors
This Draft EIS was prepared under the direction of the United States Department of Transportation FTA and WSDOT. The list of individual authors and contributors is included in Appendix D, List of Contributors.
Date of Issue of Draft Environmental Impact Statement
January 27, 2012

Date of Public Hearing
Mukilteo
February 22, 2012
5:00 PM – 8:00 PM
(brief presentation at 6:00 PM)
Rosehill Community Center
304 Lincoln Avenue
Mukilteo, WA 98275

Clinton (Whidbey Island)
February 23, 2012
5:00 PM – 8:00 PM
(brief presentation at 6:00 PM)
Clinton Community Hall
6411 Central Ave
Clinton, WA 98236

Comment Period and Subsequent Environmental Review
The 45-day comment period on the Draft EIS begins January 27, 2012. WSDOT and FTA will accept comments through March 12, 2012. Comments can be emailed to mukilteocomments@wsdot.wa.gov. The public can access the Draft EIS and comment online at http://www.wsdot.wa.gov/projects/ferries/mukilteoterminal/multimodal/.
Comments may be sent to:
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After considering the public, agency, and tribal comments, WSDOT will select a Locally Preferred Alternative. It is anticipated that a Final EIS will be prepared and issued in the first half of 2013. The Final EIS will include responses to comments on the Draft EIS. FTA is anticipated to issue a Record of Decision after publication of the Final EIS.
Date of Final Action
To be determined.

Location of Background Data
In addition to the Draft EIS, technical reports and other supporting documentation are available for review at the following locations:

Washington State Department of Transportation
Washington State Ferries Division
2901 Third Avenue, Suite 500
Seattle, WA 98121

or

http://www.wsdot.wa.gov/projects/ferries/mukilteoterminal/multimodal/

Cost of Document and Availability for Review and/or Purchase
Additional copies of the Draft EIS can be obtained in CD-ROM or print format by contacting Paul W. Krueger, Project Environmental Manager at the contact address listed above. Electronic files are also available at:

http://www.wsdot.wa.gov/projects/ferries/mukilteoterminal/multimodal/

Consistent with the Paperwork Reduction Act and FTA policy to minimize taxpayer costs, FTA will print and distribute the executive summary of the Draft EIS together with a CD-ROM of the complete Draft EIS. Printed copies of the complete Draft EIS are available for $20.00, which does not exceed the cost of printing and mailing. Copies of this document in CD-ROM are free and available upon request. Printed copies of the Draft EIS are available for viewing at selected Everett and Sno-Isle public libraries and the City of Mukilteo public library (for library locations see Appendix F, Distribution List). Readers may view the Draft EIS online at:

http://www.wsdot.wa.gov/projects/ferries/mukilteoterminal/multimodal/
S. SUMMARY

S.1 The Mukilteo Multimodal Project

The Washington State Department of Transportation (WSDOT), Ferries Division (also known as Washington State Ferries [WSF]) proposes the Mukilteo Multimodal Project to improve the operations and facilities serving the mainland terminus of the Mukilteo-Clinton ferry route in Washington State. The Federal Transit Administration (FTA) has provided funding during the project’s planning phase and may be a source of construction funding.

WSDOT and FTA are preparing this Environmental Impact Statement (EIS) for the project in compliance with the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA). FTA is the federal lead agency for the NEPA environmental review process. WSDOT is the state lead agency for SEPA.

The ferry route is part of State Route (SR) 525, the major transportation corridor across Possession Sound, which separates Island County (Whidbey Island) from the central Puget Sound mainland. The Mukilteo-Clinton route is the second-busiest in terms of vehicle traffic in the state ferry system, and it has the third-largest annual ridership. Figure S-1 shows the regional setting and Figure S-2 shows the general project area.

S.2 The Mukilteo Ferry Terminal Area

The existing Mukilteo ferry terminal is located in the city of Mukilteo in Snohomish County, Washington, west of the Mukilteo/Everett city line. The shoreline in this area faces north to northwest and runs primarily east-west within the project area. West of the existing terminal are Elliot Point and Mukilteo Lighthouse Park.

The point and its original shoreline area include several important historic and archaeological sites, including a buried shell midden created by Native American peoples, with deposits dating back over 1,000 years. In fact, the name Mukilteo is derived from a Salish name meaning “a good place to camp”. To the east of the existing terminal is a 20-acre property, currently owned by the U.S. Air Force (Mukilteo Tank Farm). The property includes a research facility operated by the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service; the research facility is also known as the NOAA Mukilteo Research Station. The U.S. Air Force property also includes lands and a large pier formerly used for fuel storage and loading. The Mukilteo/Everett city line is at the eastern end of the Mukilteo Tank Farm. The Mount Baker Terminal, a marine-to-rail intermodal facility operated by the Port of Everett, is located just east, in the city of Everett.

The BNSF Railway owns and operates a railroad that runs south of the Mukilteo ferry terminal and adjacent to the southern boundary of the Mukilteo Tank Farm. The BNSF tracks mostly follow the shoreline between Seattle and Everett. East of where the railroad crosses under SR 525, it borders the Mukilteo Tank Farm, and a rail spur connection extends to the Mount Baker Terminal. Sound Transit’s Sounder commuter rail also uses the BNSF tracks. Its Mukilteo Station is located southeast of Park Street, between the Mukilteo Tank Farm and the BNSF railroad tracks.
Figure S-1. Regional Setting
S.3 Purpose and Need

The following purpose and need statement will guide decisions about the project.

S.3.1 Project Purpose

The purpose of the Mukilteo Multimodal Project is to provide safe, reliable, and efficient service and connections for general-purpose transportation, transit, high-occupancy vehicles (HOVs), pedestrians, and bicyclists traveling between Island County and the Seattle-Everett metropolitan area and beyond. The project is intended to:

- Reduce conflicts, congestion, and safety concerns for pedestrians, bicyclists, and motorists by improving local traffic and safety at the terminal and the surrounding area that serves these transportation needs.
- Provide a terminal and supporting facilities with the infrastructure and operating characteristics needed to improve the safety, security, quality, reliability, and efficiency of multimodal transportation.
- Accommodate future demand projected for transit, HOV, pedestrian, bicycle, and general-purpose traffic.

S.3.2 Project Need

The existing facility is deficient in a number of aspects, including safety, multimodal connectivity, capacity, and the ability to support the goals of local and regional long-range transportation and comprehensive plans, including future growth in travel demand. Those factors, which are further described below, demonstrate the need for an improved multimodal facility.

Safety and Security

Safety is WSDOT’s top priority, and security at transportation facilities is a national concern. Safety and security come into play with this project in several ways: at the pedestrian/vehicle interface, with the general traffic flow in the SR 525/Front Street vicinity, and in maintaining safety and security for the facility itself.

- The Mukilteo ferry terminal has received few improvements since it was built in 1957. The existing timber structures, including the docking facilities, are beyond the end of their useful lives.
- The existing terminal does not meet current seismic standards. The existing facility is underlain by deep, potentially liquefiable soils that are highly susceptible to lateral spreading during an earthquake.
- Changed U.S. Coast Guard and U.S. Department of Homeland Security protocols now require the ability to secure terminal areas when there is a natural disaster, heightened security alert, or other emergency. The existing facility has city streets within the terminal area and does not allow for a physical separation.
between the terminal and open public areas, which increases safety and security concerns, and could require WSDOT to interrupt service or close the terminal to respond to an emergency or a heightened security alert.

- Collisions near the SR 525/Front Street intersection have included sideswipes, vehicle/pedestrian collisions, and collisions with parked vehicles.
- Because of congestion caused by ferry traffic, pedestrians often make high-risk decisions to cross the SR 525/Front Street intersection during breaks in ferry traffic; near misses between vehicles and pedestrians are common. Pedestrians who access the terminal area, transit facilities, surrounding businesses, and Mukilteo Lighthouse Park compete with vehicles for access to this intersection.
- Other inadequate facilities include a lack of passenger drop-off/pickup areas and poor bus access to the bus bay; both increase congestion and the risk of accidents.
- Passengers who are loading and unloading from the ferry or going between the toll booth and the terminal building must traverse routes that do not meet the requirements of the Americans with Disabilities Act (ADA).

**Transit Connectivity and Reliability**

The current facility provides poor connections between transit, rail, and ferry modes, which significantly hamper the quality and reliability of the transportation system in this area and add to the overall transportation and safety problems related to the terminal. The major concerns are:

- Transit connections at the Mukilteo ferry terminal cannot adequately serve current or future needs. There are only two bus bays, located 200 feet away, uphill and across a major local street. The limited transit facilities are inadequate to support the current service, including staging and layover needs for transit operations, and they have limited boarding areas and amenities for transit riders. The current configuration would not allow bus service to be expanded. In addition, the Sounder commuter rail stops at the Mukilteo Station, approximately 2,000 feet from the existing terminal, and the streets between the ferry terminal and the station have missing or substandard pedestrian and bicycle facilities.

- Keeping the ferry on schedule is integral to multimodal connectivity and the ability of the system to meet growing demand by allowing passengers to make on-time connections to scheduled bus and train service. Inefficient vehicle staging slows fare collection, which delays departures. Lack of a dedicated HOV access lane makes it difficult to implement WSDOT's preferential program for carpools, and worsens operating efficiency. Also, pedestrians walking on and off the ferry use the same span that vehicles use. This requires passengers and vehicles to be loaded at separate times, which leads to system inefficiency and can cause delays that last throughout the day.
Growth in Travel Demand

The Mukilteo-Clinton route connects the two segments of SR 525, the major transportation corridor between Island County (Whidbey Island) and the Seattle-Everett metropolitan area. SR 525 is classified as a Highway of Statewide Significance. In addition to serving ongoing travel demand, SR 525 is needed to connect the communities and military facilities on the island for evacuations, disaster relief, and medical emergencies.

WSDOT’s travel forecasts highlight the higher future demand for improved multimodal facilities serving the Mukilteo-Clinton route: WSDOT predicts a 73 percent increase in annual passengers (1,840,000 to 3,175,000) on the Mukilteo-Clinton route from 2006 to 2030.

The Mukilteo-Clinton route serves a high number of commuter trips, and growth in employment on both Whidbey Island and on the mainland is a primary reason for the predicted growth in trips by ferry. In response, the WSF Long-Range Plan calls for meeting the growing travel needs at the Mukilteo ferry terminal primarily through increasing the share of walk-on trips. This reinforces the need for improved connections and facilities between ferries and other modes, including transit, bicycle, and walking (WSDOT 2009).

Other Related Objectives

Through its public planning and outreach efforts, including public scoping comments, WSDOT has also identified environmental and project development goals to help guide the project.

- The project should be fiscally responsible and supportive of state, regional, and local transportation plans including, but not limited to, the Washington State Department of Transportation Ferries Division Final Long-Range Plan: 2009–2030 (WSDOT 2009), as well as regional and local land use plans.
- The project should be sensitive to the rich cultural and environmental resources of the vicinity in a manner that respects and enhances these resources.
- The project should not preclude development of a second slip at the terminal in the future to provide operational flexibility or additional capacity.
S.4 Alternatives

The project is considering four alternatives:

- The No-Build Alternative, which maintains the existing facility but does not improve it; this alternative provides a basis against which to compare the effects of the "Build" alternatives.

- The Existing Site Improvements Alternative, which would construct an improved multimodal facility by replacing the existing Mukilteo ferry terminal with an expanded terminal and multimodal center at the current site.

- The Elliot Point 1 Alternative, which would relocate the terminal to the eastern portion of the Mukilteo Tank Farm as part of an integrated multimodal center and remove the existing terminal.

- The Elliot Point 2 Alternative, which would relocate the terminal to the western portion of the Mukilteo Tank Farm as part of an integrated multimodal center and remove the existing terminal.

Key Parts of a Typical Ferry Terminal
The three Build alternatives are the result of several years of planning by WSDOT and FTA, in coordination with other agencies, tribes, and the public. They represent three approaches to develop the project within a physically constrained waterfront area in a manner that supports the project’s purpose and need while avoiding or minimizing impacts, particularly to the site of a shell midden that extends along much of the western waterfront.

### S.4.1 No-Build Alternative

The No-Build Alternative provides a baseline against which to compare the effects of the Build alternatives. It includes what would be needed to maintain the existing ferry terminal at a functional level. Maintenance and structure replacements would occur in accordance with legislative direction to maintain and preserve ferry facilities, but WSDOT would make no major investments for improvements. Figure S-3 illustrates the planned maintenance and preservation activities currently assumed.

Nearly all of the ferry docking, loading, and unloading facilities would need to be replaced because they will have reached the end of their lifespan by 2040. The existing vehicle holding area would remain at its current location. The terminal supervisor’s building, passenger and maintenance building, and the three existing toll booths would be replaced at their current locations. This alternative would not improve substandard conditions related to congestion, vehicular and pedestrian conflicts, poor sight distance, and security.

**Key parts of a typical ferry terminal**

- **fixed dolphin** – an assembly of steel piles or concrete drilled shafts supporting a concrete cap and a fendering system.
- **floating dolphin** – concrete or wooden barge structures located offshore clad with a perimeter fendering system and anchored to the seabed; used to help guide the ferry into the slip.
- **wingwall** – an assembly of steel piles or concrete drilled shafts supporting a steel or concrete cap and a fendering system to guide and stop the ferry at its loading and unloading position.
- **tower** – currently used to house and support the cable and counter weight system that supports, raises, and lowers the outboard end of the transfer span. (The tower system will be replaced by hydraulic lifts regardless of the alternative chosen.)
- **apron** – adjustable ramp at the end of the transfer span that accommodates varying water heights.
- **transfer span** – movable bridge that allows the vehicles and pedestrians access on and off the ferry; it is the link between the ferry and the trestle.
- **trestle and bridge seat** – over-water stationary pile-supported bridge structure that serves as a connection between land and the nearshore end of the transfer span for both vehicle and pedestrian traffic (pedestrians do not use the trestle if overhead pedestrian loading is available).
Figure S-3. No-Build Alternative

- No-Build Alternative
- Elements to be replaced
  - Ferry Traffic Control Light
S.4.2 Existing Site Improvements Alternative

The Existing Site Improvements Alternative would construct an improved multimodal facility by replacing the existing Mukilteo ferry terminal with an expanded terminal on and around the current site. Its key features are shown on Figure S-4.

All of the existing ferry facility marine and upland features would be replaced. The ferry dock and trestle would be rebuilt facing due north to provide a straighter alignment with SR 525. The Port of Everett’s existing fishing pier and seasonal day moorage would be relocated. Options for relocating the pier include placing it to the west or to the east of the new trestle.

The existing vehicle holding area would remain at the same general location and would still store the equivalent of one-and-one-half 144-vehicle vessels (approximately 216 vehicles). Toll booths and a supervisor’s building would be constructed nearby. A new passenger and maintenance building would be constructed east of the ferry access driveway expanding into areas currently occupied by other uses. Overhead passenger loading ramps would connect to the second story of the new passenger building.

Front Street and Park Avenue would become one-way streets, and First Street would be extended west to a new signalized intersection with SR 525. A new transit center would be constructed east of the vehicle holding lanes, combined with a parking area for ferry employees.
Figure S-4. Existing Site Improvements Alternative

- Existing Site Improvements
- Ferry
- To be removed
- Ferry Traffic Control Light

Mukilteo Multimodal Project
S.4.3 Elliot Point 1 Alternative

The Elliot Point 1 Alternative would develop the Mukilteo Multimodal Project on the eastern portion of the Mukilteo Tank Farm. Its key features are shown on Figure S-5.

Because the shoreline slopes more gradually in this location, the ferry slip would need to be located about 250 feet offshore, which would require a longer pier and trestle. A new passenger building and a maintenance building would be located over water on the new concrete trestle; this shortens walk distances and allows the nearby shoreline area to be developed for open space and stream restoration purposes. An overhead passenger loading ramp would connect to a second story of the new passenger building.

The Tank Farm Pier, including approximately 3,000 piles, would be removed up to its existing bulkhead and a channel 400 feet wide that provides a navigation depth of 26 feet would be dredged through part of the area currently occupied by the pier. Near the pier, current depths range from 14 to 17 feet, and other areas are deeper.

WSDOT would remove the existing ferry terminal, including buildings and marine structures, but the Port of Everett’s fishing pier at the current terminal site would remain. The current vehicle holding area would be vacated.

The Elliot Point 1 Alternative would also provide parking for commuter rail, the Mount Baker Terminal shoreline access area, and ferry employees. The alternative includes toll booths, ferry vehicle holding areas, and shoreline promenades on each side of the new ferry dock. Japanese Creek, which currently runs in a pipe culvert below the Mukilteo Tank Farm, would be restored to an open stream north of the extended First Street, with a 50-foot buffer on either side. The stream would be crossed by a pedestrian bridge near the shoreline. New lighting would illuminate First Street and the terminal facilities, including the vehicle holding areas.

The vehicle holding areas would have capacity for approximately 216 vehicles. A terminal supervisor’s building would be constructed above four new toll booths east of the holding area. This 35-foot-high structure would be oriented north-south.

First Street would be realigned and extended as a four-lane roadway from SR 525 to the Port of Everett’s Mount Baker Terminal, also providing sidewalks and bike lanes. A new signalized intersection with SR 525 would be constructed. A rebuilt First Street/Park Avenue intersection would provide access to a reconfigured parking and access area for Mukilteo Station.

A new transit center with six bus bays would be west of the new terminal. Access and parking for Mukilteo Station would be configured to connect to the First Street extension.

New security fences and gates would secure the holding and terminal area during periods of heightened security, as required by the U.S. Coast Guard.
Figure S-5. Elliot Point 1 Alternative

Mukilteo Multimodal Project
S.4.4 Elliot Point 2 Alternative

The Elliot Point 2 Alternative would develop the project on the western portion of the Mukilteo Tank Farm. It would have a more compact footprint than the Elliot Point 1 Alternative due to the deeper water near the shore where the ferry would berth. Its key features are shown on Figure S-6.

Elliot Point 2 would have the same types of marine facilities as Elliot Point 1, but because there is no beach and the water is deeper at this location, the ferry slip would be nearer to the shore than Elliot Point 1, with a shorter trestle. The Tank Farm Pier would be removed and a channel 500 feet wide that provides a navigation depth of 26 feet would be dredged through part of the area currently occupied by the pier.

The existing ferry facility, including buildings and marine structures, would be removed, but the Port of Everett’s fishing pier would remain. A ferry employee parking area would be located on the east side of SR 525, occupying part of the area currently used for vehicle holding, but the remainder of the existing holding area would be vacated.

A new passenger building and a maintenance building would be located immediately upland of the ferry dock. An overhead passenger loading ramp would connect to a second story of the new passenger building.

The vehicle holding area would have the holding capacity for approximately 216 vehicles. The terminal supervisor’s building would be west of the vehicle holding area, near four new toll booths.

First Street would be realigned and extended as a four-lane roadway from SR 525 to a signalized entrance to the new ferry terminal. First Street would continue as a two-lane road to a new bus transit and paratransit center and a relocated parking area for Mukilteo Station.

A new transit center with six new bus bays and a transit passenger area would be on the eastern part of the site.

The First Street improvements would include a new signalized intersection with SR 525 and a reconstructed intersection with Park Avenue. The extended roadway would generally be along the southern portion of the Mukilteo Tank Farm. The First Street extension would occupy areas currently used by Sound Transit for the Mukilteo Station parking and pick-up/drop-off functions.

First Street would feature sidewalks and bicycle lanes. At the driveway for the ferry terminal, a walkway would be built along the edge of the terminal from First Street to a shoreline promenade located west of the ferry slip. Other sidewalks would link the Mukilteo Station and the transit center, which would also have relocated commuter rail parking and a shoreline promenade.

As with the Elliot Point 1 Alternative, this alternative would include new security fences and gates surrounding the holding area and terminal.
Figure S-6. Elliot Point 2 Alternative

Mukilteo Multimodal Project
S.5 Transportation Impacts

Future demand for travel is expected to increase through the year 2040 on the Mukilteo-Clinton ferry route. All alternatives, including the No-Build Alternative, would be served by the same vessels and on the same schedule. For this reason, the volume of vehicle trips is expected to be similar regardless of alternative. Still, the alternatives would have different effects on traffic based on ferry reliability, wait times, where ferry queues develop, and where other traffic movements occur.

S.5.1 Ferry Terminal Operations

Ferry Loading and Unloading Times

To maintain 30-minute headways between Mukilteo and Clinton, the ferry has about 15 minutes to unload and load passengers at either terminal. When the turnaround time at a ferry terminal exceeds 15 minutes, ferry vessels can start to run behind schedule, creating two operating challenges: reduced connection reliability and reduced cross-sound capacity.

As illustrated in Figure S-7, the loading and unloading times at the Mukilteo ferry terminal under existing conditions (2010) can exceed 15 minutes during the PM peak period, which impacts reliability and capacity. In 2040 at the evening peak period, the No-Build Alternative would typically take almost 17 minutes to unload and load passengers before leaving for Clinton.

Figure S-7. Mukilteo Ferry Terminal Unloading and Loading Times
The Existing Site Improvements Alternative would reduce the time required to load and unload each ferry to about 11 minutes, well within the turnaround threshold that would enable the ferries to maintain their schedules more regularly. This is largely due to the addition of the overhead passenger loading facility. The ferry loading and unloading would still create conflicts with local traffic and pedestrian movements.

The Elliot Point 1 and Elliot Point 2 alternatives would allow the ferry to load and unload in about 10 minutes, again due to the overhead loading and also because they eliminate conflicts between ferry traffic and local traffic at the SR 525/Front Street intersection.

**Connections to Transit**

As shown in Figure S-8, the Elliot Point 2 Alternative would provide the shortest distance for connections between the ferry passenger building and rail or bus. However, for connections between the transit center and the commuter rail station, the Existing Site Improvements Alternative would have the shortest distance. For connections between downtown Mukilteo and the ferry passenger building, the shortest distance would result from the No-Build and Existing Site Improvements alternatives.

**Figure S-8. Walk Distances to Passenger Buildings**
S.5.2 Traffic Operations

Ferry Shoulder Queuing

Figure S-9 shows that queues on SR 525 are projected to increase for the 2040 No-Build, Existing Site Improvements, and Elliot Point 2 alternatives compared to 2010 conditions. Elliot Point 1 is the only alternative for which vehicle queues from the toll booth would not extend back to impact SR 525 during the typical weekday PM peak period, although summer weekends or other times may have longer queues. All Build alternatives have the same holding area capacity. The Elliot Point 1 Alternative would have the shortest queue because its First Street extension would allow for more storage before vehicles back up onto SR 525. Once vehicles queue on the shoulder of SR 525, there are more gaps for driveways and intersections, lengthening the queue for the other alternatives.

Figure S-9. Ferry Queue Lengths (Typical PM Peak Period)
Roadway Network

The projected 2040 roadway volumes would be the same for the No-Build Alternative and the Build alternatives because the capacity of the ferries would not be changed by any of the alternatives. The EIS looked at intersections along SR 525 between Fifth Street and Harbour Pointe Boulevard and also looked west to the Mukilteo Boulevard/Glenwood Avenue intersection. While vehicle delay at intersections would increase by 2040 compared to 2010, this increase reflects areawide growth rather than substantial growth in ferry vehicle traffic. Table S-1 shows the future level of service (LOS) at the intersections analyzed.

Table S-1. 2040 Level of Service during PM Peak Hour

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Control Type</th>
<th>LOS</th>
<th>2010 Existing Delay (sec/vehicle)</th>
<th>LOS</th>
<th>2040 No-Build and Build Alternatives Delay (sec/vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR 525/ Harbour Pointe Boulevard</td>
<td>Signal</td>
<td>C</td>
<td>21.2</td>
<td>D</td>
<td>51.4</td>
</tr>
<tr>
<td>SR 525/ 88th Street SW</td>
<td>Stop sign</td>
<td>E</td>
<td>43.3</td>
<td>F</td>
<td>&gt; 200</td>
</tr>
<tr>
<td>SR 525/ 84th Street SW/SR 526</td>
<td>Signal</td>
<td>C</td>
<td>28.3</td>
<td>D</td>
<td>51.9</td>
</tr>
<tr>
<td>SR 525/ 76th Street SW</td>
<td>Stop sign</td>
<td>C</td>
<td>19.5</td>
<td>D</td>
<td>28.9</td>
</tr>
<tr>
<td>SR 525/ Fifth Street</td>
<td>Signal</td>
<td>D</td>
<td>50.9</td>
<td>E</td>
<td>55.1</td>
</tr>
<tr>
<td>West Mukilteo Boulevard/</td>
<td>Stop sign</td>
<td>B</td>
<td>13.6</td>
<td>C</td>
<td>24.1</td>
</tr>
<tr>
<td>Glenwood Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LOS = level of service, with A representing lowest delay, and D, E, or F higher levels of delay.

For No-Build and Build alternatives in 2040, LOS at the SR 525/88th Street and SR 525/Fifth Street intersections would not meet the City of Mukilteo standard of LOS D.

Parking

The project area includes on and off-street parking supporting a variety of uses, including businesses, general waterfront activities, ferry terminal employees, and the commuter rail station. Parking supply (not counting the parking at Lighthouse Park) includes more than 200 off-street spaces, including the Sounder Mukilteo station, and about 70 on-street spaces. The City of Mukilteo also maintains a parking area west of the terminal that is used for longer term parking (all day or overnight) by ferry patrons.

All of the Build alternatives would remove nearly 30 on-street parking spaces, mostly along First Street, related to the First Street extension. The Elliot Point alternatives could provide more opportunities for these spaces to be replaced in other areas. The Elliot Point 1 Alternative affects a public parking area at the Mount Baker Terminal, but offers replacement parking within its new facilities and the alternative’s layout can also be modified to avoid the impact. The Elliot Point 2 Alternative would relocate parking for the commuter rail station, and replace the parking to the east.

None of the alternatives alter the limited supply of spaces the City and others make available for ferry patrons who park in Mukilteo and ride the ferry. The Elliot Point alternatives would move the terminal further away from areas that are typically used by
ferry patrons. During scoping, a number of public comments requested more spaces to allow ferry users to park and ride. WSDOT and its partners considered these and other public comments as well as the project’s purpose and need, WSDOT’s Long Range Plan objectives, the limited waterfront area land available, and cost and environmental factors. They found that alternatives that improved safety, security, transit and non-motorized connections best met the project’s purpose and need.

### S.6 Environmental Impacts

Table S-2 summarizes the potential environmental impacts that would result under each alternative, followed by a discussion of major impacts by environmental topic.

**Table S-2. Summary of Environmental Impacts by Alternative**

<table>
<thead>
<tr>
<th>Area of the Environment</th>
<th>No-Build</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Use and Economics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full acquisitions (parcels)</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Displaced residences</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Displaced businesses</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Acres of Mukilteo Tank Farm property occupied</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Compatibility with local land use/shoreline management plans</td>
<td>Low Compatibility</td>
<td>Low to Moderate Compatibility</td>
<td>High to Moderate Compatibility</td>
<td>High to Moderate Compatibility</td>
</tr>
<tr>
<td><strong>Noise and Vibration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Human Environment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Properties with noise impacts</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Properties with vibration impacts</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Visual Resource Impacts</strong></td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Social Environment and Environmental Justice</strong></td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Historic and Cultural Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identified archaeological sites with potential adverse effects</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Air Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAAQS criteria exceeded</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Hazardous Materials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential for encountering hazardous materials during construction</td>
<td>Low</td>
<td>Low to Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Redeveloped acres of previously remediated sites</td>
<td>0</td>
<td>1</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td><strong>Energy and Climate Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction energy required (MBtu)</td>
<td>807,000</td>
<td>1,564,000</td>
<td>1,516,000</td>
<td>1,203,000</td>
</tr>
<tr>
<td><strong>Geology and Soils</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to address seismic and liquefaction risks</td>
<td>Limited</td>
<td>Improved</td>
<td>Improved</td>
<td>Improved</td>
</tr>
</tbody>
</table>

Draft EIS / Executive Summary
January 2012
Table S-2. Summary of Environmental Impacts by Alternative

<table>
<thead>
<tr>
<th>Area of the Environment</th>
<th>No-Build</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Resources Impacts</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Ecosystems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net change in over-water cover (square feet)</td>
<td>+3,000</td>
<td>+12,000</td>
<td>-116,000</td>
<td>-135,000</td>
</tr>
<tr>
<td>Benefits from removal of creosote-treated piles</td>
<td>Existing facility only</td>
<td>Existing facility only</td>
<td>Existing facility and about 3,000 piles at Tank Farm Pier</td>
<td>Existing facility and about 3,000 piles at Tank Farm Pier</td>
</tr>
<tr>
<td>Construction Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built Environment</td>
<td>Higher due to multiple terminal closures; terminal closed 4 to 9 months</td>
<td>Moderate due to terminal closure and area disruptions; terminal closed 1 to 2 months</td>
<td>Low to moderate, with greater levels of construction activity but away from public areas, little to no closure of ferry service</td>
<td>Low to moderate, with greater levels of construction activity but away from public areas, little to no closure of ferry service</td>
</tr>
<tr>
<td>Natural Environment</td>
<td>Moderate due to in-water construction</td>
<td>Moderate due to in-water construction</td>
<td>Higher due to in-water construction, pier removal, dredging</td>
<td>Higher due to in-water construction, pier removal, dredging</td>
</tr>
<tr>
<td>Use of Section 4(f) Properties</td>
<td>Two potential uses</td>
<td>Up to five potential uses</td>
<td>Up to six potential uses</td>
<td>Two to three potential uses</td>
</tr>
</tbody>
</table>

NAAQS = National Ambient Air Quality Standards; MBtu = million British thermal units

S.6.1 Land Use and Economics (including Acquisitions and Displacements)

The project would acquire between one and five properties. The acquisitions include a business that would be affected by all Build alternatives, as well as a waterfront restaurant affected only by the Existing Site Improvements Alternative. By continuing use of the current ferry terminal site, the No-Build and Existing Site Improvements alternatives would not be consistent with the City’s Mukilteo Vision 2020 in its Comprehensive Plan nor with its Shoreline Master Program. The City’s plans for the waterfront presume that the existing terminal will be relocated to the Mukilteo Tank Farm.

The No-Build and Existing Site Improvements alternatives also would not be consistent with the Central Waterfront Alternative, adopted in the 1995 Mukilteo Multimodal/Inter-Modal Terminal and Access Study, which presumed the relocation of the terminal to the Mukilteo Tank Farm and the redevelopment of the existing ferry terminal to provide a pedestrian-oriented waterfront along Front Street with mixed uses on the south side of Front Street. The Existing Site Improvements Alternative displaces a restaurant and multiple artist workshops.

The Elliot Point 1 and Elliot Point 2 alternatives conform more closely with the City of Mukilteo Shoreline Management Program policies, except for not providing continuous public access along and to the shoreline.

The Elliot Point 1 and Elliot Point 2 alternatives would reduce congestion and help support increased economic activity in the waterfront commercial area. All Build
alternatives would also involve a major construction project, which would generate
jobs and increase economic activity over the short term.

S.6.2 Noise and Vibration

None of the project alternatives would result in increased long-term noise or vibration
impacts exceeding acceptable limits at noise-sensitive properties such as hotels or
residences. Construction noise related to existing terminal removal or replacement
could affect noise-sensitive residences and a hotel, but would be less with the Elliot
Point 1 and 2 alternatives because most construction would be farther away.

S.6.3 Visual Quality

The No-Build and Existing Site Improvements alternatives would occupy the same
site as the existing ferry terminal and would therefore have few effects on the visual
environment except for the Existing Site Improvement Alternative’s pedestrian
overhead lighting structure, which would obstruct some views from private
waterfront properties. The Elliot Point 1 and Elliot Point 2 alternatives would
redevelop the currently abandoned industrial area of the Mukilteo Tank Farm,
resulting in changes to the visual conditions at the Mukilteo Tank Farm and possibly
at the existing terminal location. These changes would be largely beneficial to the
visual environment. They would remove the remnants of the Mukilteo Tank Farm
operations and replace it with new transportation infrastructure, including paved
areas, buildings, lighting, and landscaping. They would expand opportunities for
public views along the waterfront and at SR 525 and along Front Street.

S.6.4 Social Environment and Environmental Justice

The Mukilteo Multimodal Project alternatives would not displace housing, social
service providers, or ethnic or cultural establishments serving low-income or minority
populations. The alternatives would be constructed either at a location where the ferry
terminal exists today, or on a currently vacant site. The Existing Site Improvements
Alternative would displace a restaurant, a business, and the public fishing pier with
seasonal day moorage. The Elliot Point 1 and Elliot Point 2 alternatives would
remove the Tank Farm Pier, which is not open to public access, but boaters access the
surrounding waters, where crab fishing is popular. In the long term, crabbing and
fishing would be available in much of the shoreline area, except for in the immediate
terminal vicinity.

The Elliot Point 1 and 2 alternatives would increase public access to waterfront areas
at both the existing site and at the Mukilteo Tank Farm. The No-Build and Existing
Site Improvements alternatives would not increase public access to the waterfront.

All of the alternatives have some potential to impact one or more historic and
pre-historic archaeological resources. Tribes in the region today trace their ancestry
back to the pre-historic inhabitants of the study area, and these resources are a link
to their heritage.
If any of the Build alternatives are determined to interfere with treaty protected tribal fishing rights, which would be an impact disproportionately borne by Native Americans, mitigation would be developed through government-to-government consultation with affected tribes.

### S.6.5 Cultural and Historic Resources

The project team has identified five potentially affected cultural resources that are listed on or recommended as eligible for listing on the National Register of Historic Places (NRHP).

- Mukilteo Light Station, a NRHP-listed early twentieth century lighthouse complex
- Point Elliott Treaty Site, the site where the 1855 treaty between the U.S. government and Puget Sound Native American tribes was signed
- Japanese Gulch Site, holding archaeological deposits associated with early twentieth century Japanese mill workers
- Old Mukilteo Townsite, holding archaeological remains of the early Mukilteo business district
- Mukilteo Shoreline Site, an archaeological site with a shell midden and other deposits dating back more than 1,000 years

Although the alternatives have been designed to avoid excavating within archaeological sites, some construction would occur on or near several sites for all alternatives. If construction activities disrupt previously undisturbed archaeological resources, this could result in adverse effects on the resources summarized in Table S-3. Based on scoping comments and outreach to tribes, there is also the potential for the site to constitute a traditional cultural property.

### S.6.6 Air Quality

All of the alternatives would meet air quality conformity requirements. They would not cause or contribute to any new violations of the National Ambient Air Quality Standards (NAAQS), and they would not delay the ability of the state or the region to attain the NAAQS.

### S.6.7 Hazardous Materials

All Build alternatives have the potential for encountering contaminated materials during construction. The Existing Site Improvements Alternative would place a transit center on a site with past contamination. The Elliot Point 1 and 2 alternatives would construct the project on the Mukilteo Tank Farm. While the Washington State
Department of Ecology has issued a letter stating the U.S. Air Force completed its required environmental cleanup plan addressing past hazardous materials releases on the Mukilteo Tank Farm, construction could encounter some areas where hazardous materials remain. Construction could also encounter metal tanks, piping, and other potential sources of hazardous materials associated with the former Mukilteo Tank Farm operation. Other hazardous materials may be present in above-ground structures. However, in most areas WSDOT proposes to remove only above-ground structures and would place fill above the existing surfaces to avoid disturbing potentially contaminated soils. Pavement or other treatments would also prevent the potential spread of hazardous materials through infiltration of stormwater, if contamination remains in underlying soils. Any hazardous materials found during construction would require handling and appropriate treatment in accordance with applicable regulations. Overall, environmental impacts would be low, and any further work to manage hazardous materials would be an environmental benefit.

All alternatives would remove creosote piles used for the current terminal. The Elliot Point 1 and 2 alternatives would also remove and dispose of the most piles. Although this action creates an overall long-term benefit, pile removal can spread creosote to a wider area.

### S.6.8 Energy and Climate Change

A comparison of long-term impacts among the alternatives indicated no major differences among the alternatives. While some alternatives could reduce energy use and emissions, these reductions would be quite modest compared to the total regional emissions. Construction energy use and emissions of greenhouse gases would be higher for the Existing Site Improvements and Elliot Point 1 alternatives than for the No-Build and Elliot Point 2 alternatives (Table S-4), but the energy required would not markedly affect energy supply or demand, considering available energy resources for the region.

<table>
<thead>
<tr>
<th>Project cost ($M)</th>
<th>No-Build</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (MBtu)</td>
<td>68</td>
<td>130</td>
<td>126</td>
<td>100</td>
</tr>
<tr>
<td>807,000</td>
<td>1,564,000</td>
<td>1,516,000</td>
<td>1,203,000</td>
<td></td>
</tr>
<tr>
<td>Greenhouse gas emissions (MT CO₂e)</td>
<td>62,000</td>
<td>120,000</td>
<td>115,000</td>
<td>91,000</td>
</tr>
</tbody>
</table>

SM = millions dollars  
MBtu = million British thermal units  
MT CO₂e = metric tons of carbon dioxide equivalents

### S.6.9 Geology and Soils

The No-Build Alternative would have more potential for adverse impacts related to soils and geologic risks than the Build alternatives because they would develop a new facility meeting current seismic standards and applying current engineering design and construction techniques. The No-Build Alternative’s replacements or upgrades to
vulnerable older structures would be more gradual, leaving some structures susceptible to damage during an earthquake.

The existing site has a significant potential for earthquake-induced liquefaction and lateral spreading that may result in structural damage and/or catastrophic failure. A large submarine landslide has been identified near the existing site. A new submarine landslide could undermine foundation structures or reduce the lateral capacity of the sediments, leading to damage or collapse of offshore structures. This would also be an issue for the Existing Site Improvements Alternative and to a lesser degree for the Elliot Point 1 and 2 alternatives, but deep foundations for the new facilities could reduce the risk.

S.6.10 Water Resources

All alternatives could affect water resources as a result of stormwater runoff from impervious surfaces (roadways and parking areas), shading of vegetated shoreline areas, and accidental spills of hazardous material. The Elliot Point 1 and 2 alternatives have the most new impervious surfaces, although many portions of the Mukilteo Tank Farm are partly impervious already. All alternatives would upgrade stormwater management systems to meet current requirements.

The Elliot Point 1 Alternative would include more over-water structures than the other alternatives because of the distance from the shore to its deep-water slip location, but all alternatives would develop new over-water structures on piles. Installing the piles could cause sediment transport impacts. The Elliot Point 1 Alternative would restore Japanese Creek to an open stream with a 50-foot buffer on each side of the stream, which would be beneficial.

The Elliot Point 1 and 2 alternatives would improve the water resource of Possession Sound by removing the existing Tank Farm Pier and pilings. They would remove some potentially contaminated sediments and could also improve sediment transport along the shoreline.

S.6.11 Ecosystems

Each alternative would remove creosote piles and decking from the existing terminal, helping reduce potential contamination to sediments, water quality, and marine organisms. In addition, the Elliot Point 1 and 2 alternatives would demolish the Tank Farm Pier and remove its associated 3,000 creosote-treated timber piles. If contaminated sediments are present, they would also be removed or managed to reduce potential impacts to water quality and ecosystems. While this would restore conditions to a more natural state, it would remove habitat that attracts Dungeness crab to this location.

Each alternative would change the amount of over-water cover due to the replacement or construction of wingwalls, dolphins, transfer spans, and passenger and maintenance facilities, as well as the demolition of the existing trestle. The Elliot Point 1 and 2 alternatives would also remove the over-water coverage of the Tank Farm Pier, as noted above. The proposed alternatives would result in the following approximate changes in over-water cover:
- No-Build Alternative: gain of 3,000 square feet
- Existing Site Improvements Alternative: gain of 12,000 square feet
- Elliot Point 1 Alternative: net removal of 116,000 square feet (22,080 square feet of new structure; removal of 138,080-square-foot Tank Farm Pier)
- Elliot Point 2 Alternative: net removal of 135,000 square feet (3,080 square feet of new structure; removal of 138,080-square-foot Tank Farm Pier)

Potential construction impacts that are common to all alternatives include habitat disturbance due to construction activities, temporary impacts due to grading and staging, temporarily impaired water quality, and impacts on aquatic species due to underwater noise (pile-driving and pile removal).

### S.6.12 Section 4(f)

Section 4(f) refers to a U.S. Department of Transportation statute protecting significant parks, recreation resources, fish and wildlife refuges, and historic properties or resources. It restricts FTA’s ability to approve a project that uses land from or has adverse impacts to a potential resource. The proposed alternatives would have the potential to impact or “use” up to two recreational resources and four archaeological or historic resources, as shown in Table S-5 below.

#### Table S-5. Summary of Potential Section 4(f) Uses

<table>
<thead>
<tr>
<th>Section 4(f) Resource Affected</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port of Everett Fishing Pier</td>
<td>X</td>
<td>Potential temporary use exception</td>
<td>Potential temporary use exception</td>
</tr>
<tr>
<td>Mount Baker Terminal Shoreline Access Area</td>
<td>X (avoidable)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mukilteo Shoreline Site (45SN383)</td>
<td>X (or exception)</td>
<td>X (or exception)</td>
<td>X (or exception)</td>
</tr>
<tr>
<td>Point Elliott Treaty Site (45SN108)</td>
<td>Potential to allow as minor impact</td>
<td>Potential to allow as minor impact</td>
<td>Potential to allow as minor impact</td>
</tr>
<tr>
<td>Old Mukilteo Townsite (45SN404)</td>
<td>X (or exception)</td>
<td>X (or exception)</td>
<td>X (or exception)</td>
</tr>
<tr>
<td>Japanese Gulch Site (45SN398)</td>
<td>Not affected</td>
<td>X (or exception)</td>
<td>Not affected</td>
</tr>
<tr>
<td>Total Section 4(f) Resources with Potential Use</td>
<td>Up to 5</td>
<td>Up to 6</td>
<td>Up to 3</td>
</tr>
</tbody>
</table>

Based on the current information, all of the alternatives have a potential Section 4(f) use. In order for FTA to approve an alternative with a Section 4(f) use for the Mukilteo Multimodal Project, FTA must demonstrate the following:

- The use of the resource is among allowed regulatory exceptions to a Section 4(f) use.
• The alternative would meet requirements of a *de minimis* impact on the property, which could allow it to occupy and affect part of the property, as long as the factors that make it significant are unchanged.

If the project’s uses do not qualify as exemptions or *de minimis* impacts, FTA must demonstrate:

• There is no feasible and prudent avoidance alternative to using any Section 4(f) resources. (The Elliot Point 1 Alternative or Elliot Point 2 Alternative may still qualify as an avoidance alternative. The Existing Site Improvements Alternative appears unable to avoid at least one of its Section 4(f) uses, and would not qualify as an avoidance alternative.)

• The program or project includes all possible planning to minimize harm to the property resulting from the use.

Finally, if there are no prudent and feasible alternatives that can avoid all Section 4(f) resources, then FTA must determine which alternative results in the least overall harm to Section 4(f) resources and the environment. This Draft EIS includes a preliminary Section 4(f) evaluation.

### S.7 Evaluation of Alternatives

The evaluation of alternatives compares the alternatives based on their effectiveness at meeting the purpose and need and avoiding environmental impacts. Table S-6 describes how each alternative meets the elements of the purpose and need related to transportation performance, while Table S-7 summarizes the areas where the alternatives have notably different environmental impacts.

#### Table S-6. Ability to Address Purpose and Need

<table>
<thead>
<tr>
<th>Purpose and Need Element</th>
<th>No-Build</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety and Security</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduces conflicts between local and ferry vehicle traffic</td>
<td>No</td>
<td>Partially, through one-way street configurations</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Reduces conflicts between vehicles and pedestrians/bicyclists</td>
<td>No</td>
<td>Partially, with street revisions and overhead loading</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Provides a secureable facility as required by U.S. Department of Homeland Security</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Addresses seismic and structural deficiencies</td>
<td>Partially over time, as facilities replaced</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table S-6. Ability to Address Purpose and Need

<table>
<thead>
<tr>
<th>Purpose and Need Element</th>
<th>No-Build</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transit Connectivity and Reliability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferry schedule reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Timely and reliable loading and unloading</td>
<td>No</td>
<td>Yes, due to overhead passenger loading; delays due to traffic impacts still occur</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Minutes over/under 15-minute reliability target</td>
<td>3 minutes over</td>
<td>4 minutes under</td>
<td>5 minutes under</td>
<td>5 minutes under</td>
</tr>
<tr>
<td><strong>Walk Distances (feet)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rail station/passerger building</td>
<td>1,460</td>
<td>1,410</td>
<td>1,600</td>
<td>995</td>
</tr>
<tr>
<td>• Transit center/passerger building</td>
<td>190</td>
<td>540</td>
<td>575</td>
<td>270</td>
</tr>
<tr>
<td>• Transit center/rail station</td>
<td>1,650</td>
<td>870</td>
<td>1,750</td>
<td>1,190</td>
</tr>
<tr>
<td>Reliable connections (on-time bus, rail, and ferry connections)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Transit facilities to support growth in travel demand</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Pedestrian and bicycle improvements</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Local transportation system impacts (daily backups on SR 525)</td>
<td>Worse than today</td>
<td>Worse than today</td>
<td>Improved: SR 525 backups removed</td>
<td>Same as today</td>
</tr>
</tbody>
</table>

Table S-7. Key Environmental Differences

<table>
<thead>
<tr>
<th>Type of Environmental Impact</th>
<th>No-Build</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Use</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflicts with City of Mukilteo’s plans to reconnect waterfront areas</td>
<td>Conflicts with City of Mukilteo’s plans to reconnect waterfront areas</td>
<td>More consistent with City’s plans for waterfront areas, but conflicts with some shoreline elements</td>
<td>More consistent with City’s plans for waterfront areas, but conflicts with some shoreline elements</td>
<td></td>
</tr>
<tr>
<td><strong>Historic and Cultural</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impacts a 1,000-year-old archaeological site</td>
<td>Impacts a 1,000-year-old archaeological site and a site from Old Mukilteo</td>
<td>Impacts a 1,000-year-old archaeological site, a site from Old Mukilteo, and the site of an immigrant settlement</td>
<td>Impacts a 1,000-year-old archaeological site and a site from Old Mukilteo</td>
<td></td>
</tr>
<tr>
<td><strong>Hazardous Materials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few impacts; possibility of encountering contamination during construction</td>
<td>Few impacts; could encounter long-term hazardous materials during construction</td>
<td>Few long-term impacts; could encounter hazardous materials during construction Removes large pier with 3,000+ creosote-treated piles</td>
<td>Few long-term impacts; could encounter hazardous materials during construction Removes large pier with 3,000+ creosote-treated piles</td>
<td></td>
</tr>
</tbody>
</table>
Table S-7. Key Environmental Differences

<table>
<thead>
<tr>
<th>Type of Environmental Impact</th>
<th>No-Build</th>
<th>Existing Site Improvements</th>
<th>Elliot Point 1</th>
<th>Elliot Point 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecosystems</td>
<td>Aquatic ecosystems benefit from replacing existing ferry facility that has creosote-treated piles; some in-water construction impacts</td>
<td>Aquatic ecosystems benefit from replacing existing ferry facility that has creosote-treated piles; some in-water construction impacts</td>
<td>Aquatic ecosystems benefit from removal of creosote piles at Tank Farm Pier and existing ferry terminal. Impacts due to loss of habitat for Dungeness crabs; higher in-water construction impacts</td>
<td>Aquatic ecosystems benefit from removal of creosote piles at Tank Farm Pier and existing terminal. Impacts due to loss of habitat for Dungeness crabs; higher in-water construction impacts</td>
</tr>
<tr>
<td>Protected Park, Recreation and Historic Properties – Section 4(f)</td>
<td>Temporary impacts to public fishing pier; impacts on archaeological site; requires mitigation agreements</td>
<td>Removal (use) of public fishing pier; impacts on archaeological sites; requires mitigation agreements</td>
<td>Temporary impacts to fishing pier; impacts on public shoreline access area; impacts on archaeological sites; requires mitigation agreements</td>
<td>Temporary impacts to fishing pier; impacts on archaeological sites; requires mitigation agreements</td>
</tr>
</tbody>
</table>

S.8 Public Involvement and Agency and Tribal Coordination

Since the Mukilteo Multimodal Project was initiated in 2004, WSDOT and FTA have provided frequent opportunities for interested members of the public, agencies, and tribes to engage, share concerns, and discuss specific project details with WSDOT staff. Public involvement activities to date have included public meetings, agency and tribal meetings, online meetings, and stakeholder briefings. For more information, see Chapter 7 Agency, Tribal, and Public Involvement.

The environmental review process for the Mukilteo Multimodal Project began with a NEPA Environmental Assessment (EA) in 2004. WSDOT held two public EA scoping meetings in the fall of 2004. On February 17, 2006, FTA published a Notice of Intent (NOI) to prepare an EIS for the Mukilteo Multimodal Project, and announced a 30-day public comment period that ended on April 5, 2006. FTA and WSDOT requested public comments on the scope of the alternatives and the impacts to be considered, and held two public meetings in March 2006. FTA and WSDOT also held an agency scoping meeting for the EIS on March 21, 2006.

The Washington State Legislature put the project on hold in 2007 due to funding and constructability issues associated with the previously identified alternatives.

WSDOT and FTA reintroduced the environmental review process in February 2010, and conducted a second scoping period, including a public comment period. The purpose of the second scoping period was to reintroduce the project purpose and need and informally gather input from agencies and the public on the full range of potential alternatives and potential impacts.

WSDOT and FTA conducted another round of public scoping meetings in October 2010 to formally reintroduce the project, explain the environmental review process and new issues to be considered, and provide opportunities for members of the
public to comment on the purpose and need and expanded range of alternatives under consideration. WSDOT and FTA held four in-person public scoping open houses in 2010 to serve directly affected populations, and one online open house to increase participation among the broader community. All public meetings were held at ADA- and transit-accessible, publicly-owned facilities. Approximately 160 people attended the meetings in Whidbey Island, Mukilteo, Edmonds, and Everett; 15 people participated in the virtual online open house. WSDOT received approximately 365 public comments during the scoping period at public meetings, by mail, e-mail, and online using the Google map comment tool.

WSDOT and FTA received feedback from agencies and tribes early in the environmental review process and have engaged in continuous consultation since then. During the scoping process, WSDOT hosted meetings with agencies, tribes, and jurisdictions to provide project information and obtain feedback.

FTA, working with the WSDOT Mukilteo Multimodal Project Tribal Liaison, formally contacted potentially affected tribes to assess their interest in the Mukilteo Multimodal Project. In particular, FTA contacted tribal governments representing all the tribes who signed the Point Elliott Treaty, because the Mukilteo shoreline is recognized as the area where the treaty was signed. FTA and WSDOT have offered each potentially interested tribe the opportunity to participate in the development of the EIS. Four tribes have accepted cooperating agency status (a higher level of participation): Samish Indian Nation, Stillaguamish Tribe, Suquamish Tribe, and Tulalip Tribes.

S.9 Next Steps

The release of this Draft EIS begins a 45-day review and comment period, including public hearings. During this period, the public, agencies, and tribes may comment on the alternatives under evaluation and the associated environmental impacts.

After considering comments received on the Draft EIS, WSDOT will identify a Locally Preferred Alternative. It plans to prepare and circulate to the public a Final EIS during the first half of 2013.

No sooner than 30 days after the Final EIS is released, FTA is anticipated to issue a Record of Decision. This would allow WSDOT to move forward with securing funding, completing final design, and starting construction.